The invention claimed is:

1. A method of treating erectile sexual dysfunction by applying light to erectile genitalia tissue.

2. A method as defined in claim 1, further comprising applying infrared light to the genitalia tissue.

3. A method as defined in claim 1, further comprising applying near-infrared light to the genitalia tissue.

4. A method as defined in claim 1, further comprising applying substantially monochromatic light having a wavelength of approximately 884 nanometers to the genitalia tissue.

5. A method as defined in claim 1, further comprising applying a sufficient amount of light to release nitric oxide into erectile genitalia tissue.

6. A method as defined in claim 1, further comprising applying a sufficient amount of light to release nitric oxide into erectile genitalia tissue in sufficient quantities to cause the erectile tissue to relax and engorge.

7. A method as defined in claim 1, further comprising augmenting a pharmacologically-induced release of nitric oxide into erectile genitalia tissue by applying the light to the genitalia tissue.

8. A method as defined in claim 7, further comprising applying a sufficient amount of light to release nitric oxide into erectile genitalia tissue that would otherwise not be released pharmacologically.

9. A method as defined in claim 1, applied to males.

10. A method as defined in claim 9, further comprising applying the light to penetrate into the corpus cavernosum of the penis.

11. A method as defined in claim 9, further comprising applying the light to penetrate into the top of the penis.

12. A method as defined in claim 11, further comprising applying the light from an applicator having a plurality of light sources distributed in an array over an inner substantially-semicircular application surface having dimensions sufficient to

surround the top of the penis, and positioning the application surface over the top of the penis.

13. A method as defined in claim 12, further comprising positioning the application surface against the top of the penis.

14. A method as defined in claim 13, applied to humans.

15. A method as defined in claim 1, applied to females.

16. A method as defined in claim 15, further comprising applying the light to penetrate into external vagina tissues.

17. A method as defined in claim 16, further comprising applying the light to penetrate into the clitoris and labia.

18. A method as defined in claim 17, further comprising applying the light from an applicator having a plurality of light sources arranged in an array distributed over an application surface having dimensions sufficient to encompass the clitoris and labia, and positioning the application surface over the clitoris and labia.

19. A method as defined in claim 18, further comprising positioning the application surface against the labia.

20. A method as defined in claim 18, further comprising positioning the application surface against the clitoris.

21. A method as defined in claim 18, further comprising positioning the application surface against the clitoris and the labia.

22. A method as defined in claim 18, applied to humans.

23. Apparatus for treating erectile sexual dysfunction of an animal, comprising:

a frame structure having an application surface of sufficient dimensions to encompass erectile genitalia tissues of the animal;

a plurality of light sources distributed in an array over the application surface; and

a source of energy connected to energize the light sources; and wherein:

the energized light sources emit light energy of a wavelength sufficient to penetrate into the erectile genitalia tissues and release nitric oxide.

24. Apparatus as defined in claim 23, wherein:

the energized light sources emit light energy to release a sufficient amount of nitric oxide into the erectile genitalia tissue to cause the erectile genitalia tissue to relax and engorge.

25. Apparatus as defined in claim 23, wherein:

the energized light sources emit substantially monochromatic light at a wavelength of approximately 884 nanometers.

26. Apparatus as defined in claim 23, wherein:

the light sources comprise at least one light emitting diode.

27. Apparatus as defined in claim 23, wherein:

each light source comprises a light emitting diode which emits infrared light when energized, each light emitting diode attached to the frame structure; and further comprising:

a control module which comprises the source of energy, the source of energy comprising a source of electrical energy; and

a cable connecting the control module to the frame structure and conducting electrical energy from the electrical energy source to the light emitting diodes.

28. Apparatus as defined in claim 23 for use with males, wherein:

the applicator surface of the frame structure defines an inner substantially-semicircular configuration having dimensions sufficient to surround the top of the penis.

29. Apparatus as defined in claim 28, wherein:

the dimensions of the substantially-semicircular configuration allow the application surface to contact substantially the entire top of the penis between the base and the glans.

30. Apparatus as defined in claim 23 for use with females, wherein:

the application surface of the frame structure has dimensions sufficient to encompass the clitoris and labia.

31. Apparatus as defined in claim 30, wherein:

the dimensions of the application surface allow the application surface to contact simultaneously substantially the entire female genitalia area which includes the clitoris and labia.